



Bury it and forget it.

## BLUE SEAL® PIPE. WATERTIGHT PERFORMANCE.

### THE PERFORMANCE YOU EXPECT. THE INNOVATIONS YOU NEED.

With over a century of experience, we're experts when it comes to drainage, providing innovative solutions for all kinds of applications. Our HDPE pipe delivers superior value while providing physical strength and structural design that just cannot be matched by metal or concrete.

The patented, highly engineered composite joint system is being described as the best watertight solution on the market.

BLUE SEAL is a gravity flow, watertight pipe ideal for storm sewers, detention systems, and cross, slope or edge drains. Other applications include golf courses, sports playing fields, or parking lot drainage, as well as irrigation ditch enclosures.

Available in a complete range of sizes from 4" - 60" (100 - 1500mm) diameters, this Hancor exclusive solution is 3rd party verified to meet 10.8 psi pressure and vacuum testing requirements and EPA Phase II Best Management Practices. Once again, Hancor leads the way in offering a 60" corrugated HDPE verified watertight joining system.

The unique feature that sets this system apart from any other is a highly engineered integral bell-and-spigot system that utilizes a ceramic/polymer composite fused to the outside of the integral bell with a patented, factory-installed gasket. This revolutionary coupling system maintains bell dimension after pressurization providing uniform tolerances to ensure the highest consistent performance not found in the corrugated pipe industry.

### FEATURES

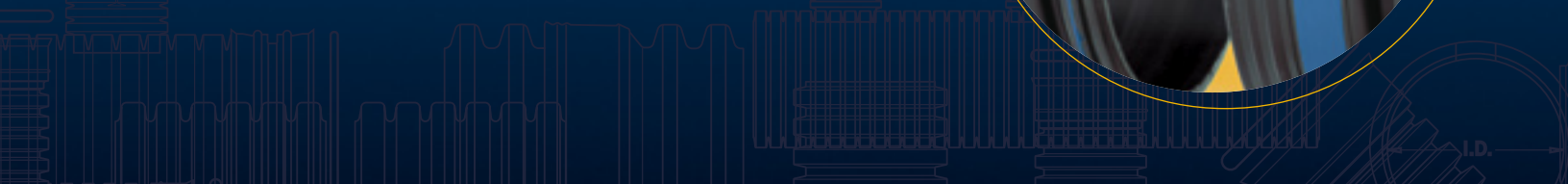
- Meets 10.8 psi water pressure and vacuum lab testing requirements.
- HS-25 (Highway traffic loads) rated with minimal cover.
- Addresses EPA Phase II Best Management Practices for long-term service reliability.
- Lightweight, high strength composite joint requires less labor time for faster installations and reduced costs.
- Bell reinforcement provides uniform support not found in the corrugated polyethylene pipe industry.
- Fast bell-and-spigot joint assembly with unsurpassed structural integrity.
- HDPE pipe provides superior resistance to prevent rusting, deterioration or crumbling.

### BENEFITS

- Provides a visible commitment to better water quality, minimizing environmental impact.
- Prevents the contamination of soil and local waters from harmful substances such as sediment from construction runoff, lawn care products or automobile emissions.
- Avoids possible joint infiltration of sands and fines resulting in sinkholes and differential settlement to adjacent structures.
- Reduces the risk of blockage caused by vegetation infiltration into joints.
- Reduces soil migration.



**Hancor Service:** Hancor representatives and engineers are committed to providing you with the answers to all your questions, including specifications, installation, backfill recommendations and more.



# HANCOR BLUE SEAL PIPE SPECIFICATIONS

## SCOPE

This specification describes 4" - 60" (100 to 1500 mm) Hancor BLUE SEAL pipe for use in gravity flow applications.

## PIPE REQUIREMENTS

BLUE SEAL pipe shall have a smooth interior and annular exterior corrugations.

- 4" - 10" (100 to 250 mm) shall meet AASHTO M252, Type S.
- 12" - 60" (300 to 1500 mm) shall meet AASHTO M294, Type S or ASTM F2306.
- Manning's "n" value for use in design shall be 0.012.

## JOINT PERFORMANCE

Pipe shall be joined with the BLUE SEAL joint meeting the watertight requirements of AASHTO M252, AASHTO M294, or ASTM F2306.

4" - 60" (100 to 1500 mm) shall be watertight according to the requirements of ASTM D3212. Gaskets shall be made of polyisoprene meeting the requirements of ASTM F477. Gaskets shall be installed by the pipe manufacturer and covered with a removable wrap to ensure the gasket is free from debris. A joint lubricant available from the manufacturer shall be used on the gasket and bell during assembly. 12" - 60" (300 to 1500 mm) diameters shall have a reinforced bell with a bell tolerance device. The bell tolerance device shall be installed by the manufacturer.

## FITTINGS

Fittings shall conform to AASHTO M252, AASHTO M294, or ASTM F2306. Fabricated fittings shall be welded at all accessible interior and exterior junctions.

## FIELD PIPE AND JOINT PERFORMANCE

To assure watertightness, field performance verification may be accomplished by testing in accordance with ASTM C969. Appropriate safety precautions must be used when field-testing any pipe material.

## MATERIAL PROPERTIES

Virgin material for pipe and fitting production shall be high-density polyethylene conforming with the minimum requirements of cell classification 424420C for 4" - 10" (100 to 250 mm) diameters, and 435400C for 12" - 60" (300 to 1500 mm) diameters, as defined and described in the latest version of ASTM D3350. The 12" - 60" (300 to 1500 mm) virgin pipe material shall be a slow crack resistant material evaluated using the notched constant ligament-stress (NCLS) test according to the procedure described in AASHTO M294, Section 9.5. Average NCLS test specimens must exceed 24 hrs. with no test result less than 17 hrs.

## INSTALLATION

Installation shall be in accordance with ASTM D2321 and Hancor's published installation guidelines, with the exception that minimum cover in trafficked areas for 4" - 48" (100 to 1200 mm) diameters shall be one foot (0.3 m) and for 54" and 60" (1350 and 1500 mm) diameters, the minimum cover shall be 2 ft. (0.6 m). Contact your local Hancor representative or visit our website at [www.hancor.com](http://www.hancor.com) for a copy of the latest installation guidelines.

## PIPE DIMENSIONS

Pipe I.D., in. (mm)	4 (100)	6 (150)	8 (200)	10 (250)	12 (300)	15 (375)	18 (450)	24 (600)	30 (750)	36 (900)	42 (1050)	48 (1200)	54* (1350)	60 (1500)
Pipe O.D.,** in. (mm)	4.8 (122)	6.9 (175)	9.1 (231)	11.4 (290)	14.5 (368)	18 (457)	22 (559)	28 (711)	36 (914)	42 (1067)	48 (1219)	54 (1372)	61 (1549)	67 (1702)

\*Check with sales representative for availability by region.

\*\*Pipe O.D. values are provided for reference purposes only, values stated for 12" - 60" are ± 1 inch. Exact values are provided in the Structures section of the Drainage Handbook.

Hancor "Terms and Conditions of Sale" are available on the Hancor web site, [www.hancor.com](http://www.hancor.com)

## DIRECT CONTACT

**Customer Service**  
888-FOR PIPE (367-7473)  
Fax 888-FAX PIPE (329-7473) 24 hours a day

## ELECTRONIC MEDIA

**Web Site**  
Find market- and application-specific information and the latest industry news at our On-Line Pipeline - [www.hancor.com](http://www.hancor.com)